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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,932	09/29/2003	Teck Hu	17	1634

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Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Road
Holmdel, NJ 07733-3030

EXAMINER

NGUYEN, KHAI MINH

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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07/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/673,932

Applicant(s)

HU, TECK

Examiner

Khai M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-16 and 18-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-13 and 25-32 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 14-16, 18-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ✓ | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/5/2007 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over ETSI TS 122 146 V.5.2.0 (2002-2003) in view of Trossen et al. (U.S.Pub-20030157899).

Regarding claim 1, ETSI teaches a method of wireless communication with a number of subscribers to a subscription-based service (fig.2, pages 7-8, section 4.2), the method comprising:

determining the number of multicast service subscribers within a cell (home environment) (fig.2, section 4.2, section 4.2.1, and section 5.2.1, multimedia service,

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operator specific services, movie/music streaming, live web casting, TV news/sports/advertising);

determining at least one of a geographical distribution of a number of multicast service subscribers (fig.2, section 4.2, section 4.2.1, and section 5.2.1, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising) and a subscription distribution of the number of multicast service subscribers within the cell (home environment) (fig.2, pages 7-8, section 4.2, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising); and

assigning one of a plurality of service rates to at least one of a plurality of subscription-based service types, said one of the plurality of service rates being selected based on at least one of channel conditions, power requirements, service subscription type, desired content, other services and equipment class of each subscriber

ETSI fails to specifically disclose assigning one of a plurality of service rates to at least one of a plurality of subscription-based service types, said one of the plurality of service rates being selected based on at least one of channel conditions, power requirements, service subscription type, desired content, other services and equipment class of each subscriber. However, Trossen teaches assigning one of a plurality of service rates to at least one of a plurality of subscription-based service types (paragraph 0032-0034), said one of the plurality of service rates being selected based on at least

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one of channel conditions, power requirements, service subscription type, desired content, other services and equipment class of each subscriber (paragraph 0032-0034). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Trossen to ETSI to provide a method for transmitting multicast over a wireless channel.

Regarding claim 15, ETSI teaches a method of wireless communication comprising:

receiving a subscription-based service at an assigned service rate (section 5.1.2), and further being based on at least one of a determined geographical distribution of a number of multicast service subscribers (fig.2, pages 7-8, section 4.2, and section 4.2.1, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising) and a determined subscription distribution of the number of multicast service subscribers within the cell (fig.2, section 4.2, section 4.2.1, and section 5.2.1, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising).

ETSI fails to specifically disclose the assigned service rate corresponding with at least one of plurality of service subscription types and being selected from a plurality of service rates based on at least one of desired content, channel conditions, power requirements, other services and equipment class. However, Trossen teaches the assigned service rate corresponding with at least one of plurality of service subscription types (paragraph 0032-0034) and being selected from a plurality of service rates based

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on at least one of desired content, channel conditions, power requirements, other services and equipment class (paragraph 0032-0034). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Trossen to ETSI to provide a method for transmitting multicast over a wireless channel.

4. Claims 2-3, 6, 14,16, and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over ETSI TS 122 146 V.5.2.0 (2002-2003) in view of Trossen et al. (U.S.Pub-20030157899) further in view of Koulakiotis et al. (U.S.Pub-20030104801).

Regarding claim 2, ETSI and Trossen further teach the method of claim 1, wherein the subscription-based service comprises at least a multicast service (see ETSI, fig.2, section 4.2, section 4.2.1, and section 5.2.1, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising),

ETSI and Trossen fail to specifically disclose the at least one service rate comprises at least one multicast rate, and said at least one of the subscription-based service type comprises at least a multicast service subscription type. However, Koulakiotis teaches the at least one service rate comprises at least one multicast rate (paragraph 0008, 0015-0016), and at least one of the subscription-based service type comprises at least a multicast service subscription type (paragraph 0006, 0068). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Koulakiotis to ETSI and Trossen to providing a service to a user comprising the steps of defining an area in which the service is available.

Regarding claim 3, Koulakiotis, ETSI and Trossen further teach the method of claim 2, wherein the multicast service subscription type comprises at least one of a basic type and a premium type (see Koulakiotis, paragraph 0006, see ETSI, fig.2, pages 7-8, section 4.2, and section 4.2.1, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising).

Regarding claim 6, Koulakiotis, ETSI and Trossen further teach the method of claim 2, comprising: multicasting information to each of the multicast service subscribers at each multicast service subscription type's assigned multicast rate (see Koulakiotis, paragraph 0006, 0068, see ETSI, fig.2, pages 7-8, section 4.2, and section 4.2.1, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising).

Regarding claim 14, Koulakiotis, ETSI and Trossen further teach the method of claim 2, wherein the other services comprises at least one of voice, HSDPA and HSUPA (see ETSI, fig.2, pages 7-8, section 4.2, and section 4.2.1, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising).

Regarding claim 16, ETSI teaches the method of claim 15,

ETSI and Trossen fail to specifically disclose the subscription-based service comprises at least a multicast service, the at least one service rate comprises at least one multicast rate, and the service subscription type comprises at least a multicast service subscription type. However, Koulakiotis teaches the subscription-based service

comprises at least a multicast service (paragraph 0006), the at least one service rate comprises at least one multicast rate (paragraph 0008, 0015-0016), and the service subscription type comprises at least a multicast service subscription type (paragraph 0006, 0068). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Koulakiotis to ETSI and Trossen to providing a service to a user comprising the steps of defining an area in which the service is available.

Regarding claim 18, Koulakiotis, ETSI and Trossen further teach the method of claim 16, wherein the multicast service subscription type comprises at least one of a basic type and a premium type (see Koulakiotis, paragraph 0006).

Regarding claim 19, Koulakiotis, ETSI and Trossen further teach the method of claim 16, comprising: prioritizing the other services and the multicast service subscription service (see Koulakiotis, fig.3, paragraph 0007, 0029-0030).

Regarding claim 20, Koulakiotis, ETSI and Trossen further teach the method of claim 19, comprising: scaling the multicast service subscription types available for assigning in response to a change in demand for the other services (see Koulakiotis, paragraph 0006, 0068).

Regarding claim 21, Koulakiotis, ETSI and Trossen further teach the method of claim 20, wherein the step of scaling comprises at least one of dropping and adding support for at least one of the multicast service subscription types (see Koulakiotis, paragraph 0030-0032).

Regarding claim 22, Koulakiotis, ETSI and Trossen further teach the method of claim 21, wherein the demand corresponds with at least one of power, channelization codes, and subscription fees (see ETSI, fig.2, pages 7-8, section 4.2, and section 4.2.1, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising).

Regarding claim 23, Koulakiotis, ETSI and Trossen further teach the method of claim 19, wherein the other services comprises at least one of voice, HSDPA and HSUPA (see ETSI, fig.2, pages 7-8, section 4.2, and section 4.2.1, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising).

Regarding claim 24, Koulakiotis, ETSI and Trossen further teach the method of claim 16, wherein the equipment class corresponds with at least one supporting channelization code (see ETSI, fig.2, pages 7-8, section 4.2, and section 4.2.1, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising).

Allowable Subject Matter

5. Claims 7-13 and 25-32 are allowed.

Applicant's independent claim 7: The present invention is directed to a method of wireless communication with a number of subscribers to a subscription-based service, the independent claim identifies the patentably distinct feature "prioritizing the assigning of the at least one multicast rate to support the multicasting information to at

least one of a maximum number of multicast service subscribers, a maximum number of multicast service subscribers having the premium service type, and a maximum number of multicast service subscribers having the basic service type; and multicasting information to each of the multicast service subscribers at each multicast service subscription type's assigned multicast rate". Applicant's independent claim 7 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claim 25: The present in invention is directed to A method of wireless communication with a number of subscribers to a subscription-based service, the independent claim identifies the patentably distinct feature "assigning at least one second service rate to at least one second subscription-based service type associated with at least one second subscriber, said at least one second service rate differing from said at least one first service rate and being selected based on information indicative of network infrastructure demands associated with said at least one second subscriber; and concurrently multicasting information to said at least one first subscriber and said at least one second subscriber at said at least one first service rate and said at least one second service rate, respectively". Applicant's independent claim 25 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571.272.7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on 571.272.7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khai Nguyen
Au: 2617


RAFAEL PEREZ-GUTIERREZ
SUPERVISORY PATENT EXAMINER

7/16/2007

7/20/02